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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/589,627	06/07/2000	Howard Gurney	858063.449	8613

7590 05/18/2005  
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EXAMINER
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NGUYEN, TOAN D

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/589,627

Applicant(s)

GURNEY, HOWARD

Examiner

Toan D. Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19, 21, 22, 24-26 and 28-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-13, 15-19, 21, 22, 24-26 and 28-36 is/are rejected.
- 7) ☒ Claim(s) 10 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the figure 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Allowable Subject Matter***

2. The indicated allowability of claims 19-21, 23-25 and 27-29 are withdrawn in view of the newly discovered reference(s) to Lenihan et al. (US 6,169,843), Teunissen (US

6,512,882) and Lee (US 6236432). Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9, 11-13, 15-19, 21, 30 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenihan et al. (US 6,169,843) in view of Teunissen (US 6,512,882).

For claim 1, Lenihan et al. disclose recording and playback of audio-video transport streams, said device comprising:

identifying means (figure 3A, reference 314) for identifying a first plurality of portions of data from said received stream of data (col. 7 lines 15-17) and producing a first output stream (figure 3A, reference TRANSPORT STREAM OUTPUT) (col. 8 lines 52-54);

first output means for outputting said first output stream (col. 8 lines 52-54);

selecting means for selecting a second plurality of portions of data from said received stream of data (col. 7 lines 15-31) and producing an alternative output stream (figure 3A, reference ANALOG AUDIO-VIDEO) (col. 8 lines 26-29);

determining means for determining the relative timing of said second plurality of portions of data (figure 3A, col. 7 lines 34-40); and

second output means for outputting said alternative output stream (figure 3A, reference ANALOG AUDIO-VIDEO) (col. 8 lines 26-29), wherein the first plurality of portions of data includes audio and video (col. 4 lines 3-9).

However, Lenihan et al. do not expressly disclose the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained. In an analogous art, Teunissen discloses the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained (figure 6, col. 5 lines 29-35).

One skilled in the art would have recognized the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained, and would have applied Teunissen's unpackaging a transport stream in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Teunissen's method of storing digital audio and/or video programs compressed on the basis of groups of pictures (GOP) on a medium with immediate jumping between groups through co-storage of transport stream packets and pointer information, a method for reading such information, and a device for storing and/or reading such information in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to synchronize video decoder block 122 and audio decoder block 124 (col. 5 lines 32-34).

For claim 2, Lenihan et al. disclose wherein said stream of data comprises a plurality of data packets (col. 4 lines 3-9) and said plurality of portions of data occur within a packet (figure 1B, col. 4 lines 31-34).

For claim 3, Lenihan et al. disclose wherein each portion of data comprises a byte of data (figure 1B, col. 4 lines 31-34).

For claim 4, Lenihan et al. disclose wherein means are provided for identifying which of said plurality of packet comprise data to be output by said output means (figure 3A, reference 314, col. 7 lines 15-31).

For claim 5, Lenihan et al. disclose wherein storage means (figure 3A, reference 316) are provided for storing information for each portion of a packet indicating if the portion of data is valid or invalid (col. 7 lines 25-33).

For claim 6, Lenihan et al. disclose wherein said information comprises a data portion valid signal (col. 7 lines 25-33).

For claim 7, Lenihan et al. disclose wherein the storage means comprises a first-in-first-out buffer (figure 3A, reference 316, col. 7 lines 31-33).

For claim 8, Lenihan et al. disclose wherein each data packet includes information identifying the beginning of said packet and means are provided for identifying the beginning of each packet (figure 3A, reference 314, col. 7 lines 15-17).

For claim 9, Lenihan et al. disclose wherein said means for identifying the beginning of a packet provides an output for controlling the timing of the output of the selected data by said output means (figure 3A, col. 7 lines 15-28).

For claim 11, Lenihan et al. disclose wherein means are provided for storing the selected portions of said data (figure 3A, reference 316, col. 7 lines 15-33).

For claim 12, Lenihan et al. disclose wherein the means for storing the selected portions of data stores only the selected portions of data (figure 3A, reference 316, col. 7 lines 15-33).

For claim 13, Lenihan et al. disclose wherein the means for storing the selected portions of data is a first-in-first-out buffer (figure 3A, reference 316, col. 7 lines 31-33).

For claim 15, Lenihan et al. disclose wherein the input stream conforms to the MPEG-2 standard (figure 1B, col. 4 line 31).

For claim 16, Lenihan et al. disclose recording and playback of audio-video transport streams, said device comprising:

identifying means (figure 3A, reference 314) for identifying a first plurality of portions of data from said received stream of data (col. 7 lines 15-17) and producing a first output stream (figure 3A, reference TRANSPORT STREAM OUTPUT) (col. 8 lines 52-54);

first output means for outputting said first output stream (col. 8 lines 52-54);

selecting means for selecting a second plurality of portions of data from said received stream of data (col. 7 lines 15-31) and producing an alternative output stream (figure 3A, reference ANALOG AUDIO-VIDEO) (col. 8 lines 26-29);

determining means for determining the relative timing of said second plurality of portions of data (figure 3A, col. 7 lines 34-40); and

second output means for outputting said alternative output stream (figure 3A, reference ANALOG AUDIO-VIDEO) (col. 8 lines 26-29), wherein the first plurality of portions of data includes audio and video (col. 4 lines 3-9).

However, Lenihan et al. do not expressly disclose the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained. In an analogous art, Teunissen discloses the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained (figure 6, col. 5 lines 29-35).

One skilled in the art would have recognized the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained, and would have applied Teunissen's unpackaging a transport stream in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Teunissen's method of storing digital audio and/or video programs compressed on the basis of groups of pictures (GOP) on a medium with immediate jumping between groups through co-storage of transport stream packets and pointer information, a method for reading such information, and a device for storing and/or reading such information in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to synchronize video decoder block 122 and audio decoder block 124 (col. 5 lines 32-34).

For claim 17, Lenihan et al. disclose recording and playback of audio-video transport streams, said device comprising:

receiving a stream of data (figure 3A, col. 6 lines 47-48);

identifying (figure 3A, reference 314) a first plurality of portions of data from said received stream of data (col. 7 lines 15-17) and producing a first output stream (figure 3A, reference TRANSPORT STREAM OUTPUT) (col. 8 lines 52-54);



outputting said first output stream (col. 8 lines 52-54);  
selecting a second plurality of portions of data from said received stream of data (col. 7 lines 15-31) and producing an alternative output stream (figure 3A, reference ANALOG AUDIO-VIDEO) (col. 8 lines 26-29);  
determining the relative timing of said second plurality of portions of data (figure 3A, col. 7 lines 34-40); and  
outputting the alternative output stream (figure 3A, reference ANALOG AUDIO-VIDEO) (col. 8 lines 26-29), wherein the first plurality of portions of data includes audio and video (col. 4 lines 3-9).

However, Lenihan et al. do not expressly disclose the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained. In an analogous art, Teunissen discloses the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained (figure 6, col. 5 lines 29-35).

One skilled in the art would have recognized the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained, and would have applied Teunissen's unpackaging a transport stream in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Teunissen's method of storing digital audio and/or video programs compressed on the basis of groups of pictures (GOP) on a medium with immediate jumping between groups through co-storage of transport stream packets and pointer information, a method for reading such

information, and a device for storing and/or reading such information in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to synchronize video decoder block 122 and audio decoder block 124 (col. 5 lines 32-34).

For claim 18, Lenihan et al. disclose wherein the received data stream comprises multiplexed portions of the first plurality of portions of data and the second plurality of portions of data (col. 5 lines 58-60).

For claim 19, Lenihan et al. disclose wherein the second plurality of portion of data comprises audio and video data (col.4 lines 3-9 and col. 8 lines 26-29).

For claim 21, Lenihan et al. disclose wherein the second plurality of portions of data includes audio data and video data (col. 4 lines 3-9 and col. 8 lines 26-29).

For claim 30, Lenihan et al. disclose recording and playback of audio-video transport streams, said device comprising:

an input interface (figure 3A, references 310 and 312 constitute an input interface, col. 6 lines 48-67) for identifying a first plurality of portions of data in the received data stream (col. 8 lines 52-54) and a second plurality of portions of data in the received data stream (col. 8 lines 26-29 );

an output interface for producing a first output stream corresponding to the first plurality of portions of data in the received data stream (figure 2, col. 6 lines 15-19) and a second output stream corresponding to the second plurality of portions of data in the received data stream (figure 3A, col. 8 lines 54-57).

Lenihan et al. disclose wherein the first plurality of portion of data includes audio and video data (col. 4 lines 3-9). However, Lenihan et al. do not expressly disclose a

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timing controller coupled to the output interface for maintaining relative timing between the received data stream and the second output stream. In an analogous art, Teunissen discloses a timing controller (figure 6, reference 126) coupled to the output interface for maintaining relative timing between the received data stream and the second output stream (figure 6, col. 5 lines 29-35).

One skilled in the art would have recognized the timing controller coupled to the output interface for maintaining relative timing between the received data stream and the second output stream, and would have applied Teunissen's unpackaging a transport stream in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Teunissen's method of storing digital audio and/or video programs compressed on the basis of groups of pictures (GOP) on a medium with immediate jumping between groups through co-storage of transport stream packets and pointer information, a method for reading such information, and a device for storing and/or reading such information in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to synchronize video decoder block 122 and audio decoder block 124 (col. 5 lines 32-34).

For claim 32, Lenihan et al. disclose wherein said stream of data comprises a plurality of data packets (col. 4 lines 3-9) and said plurality of portions of data occur within a packet (figure 1B, col. 4 lines 31-34).

For claim 33, Lenihan et al. disclose wherein said stream of data comprises a plurality of data packets (col. 4 lines 3-9) and said plurality of portions of data occur within a packet (figure 1B, col. 4 lines 31-34).

For claim 34, Lenihan et al. disclose wherein each portion of data comprises a byte of data (figure 1B, col. 4 lines 31-34).

For claim 35, Lenihan et al. disclose wherein means are provided for identifying which of said plurality of packet comprise data to be output by said output means (figure 3A, reference 314, col. 7 lines 15-31).

For claim 36, Lenihan et al. disclose wherein storage means (figure 3A, reference 316) are provided for storing information for each portion of a packet indicating if the portion of data is valid or invalid (col. 7 lines 25-33).

5. Claims 22, 24-26, 28-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenihan et al. (US 6,169,843) in view of Teunissen (US 6,512,882) further in view of Lee (US 6,236,432).

For claim 22, Lenihan et al. disclose recording and playback of audio-video transport streams, said device comprising:

first processing circuit (figure 3A, references 355, 360 and 365 constitute the first processing circuit means) for identifying a first plurality of portions of data in the received data stream of data and producing a first output data stream (col. 8 lines 29-54);

second processing circuitry (figure 3A, references 350 and 240 constitute the second processing circuitry means) for identifying a second plurality of portions of data

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in the received data stream of data (col. 7 lines 15-31) and producing a second output data stream (col. 8 lines 26-29).

However, Lenihan et al. do not expressly disclose timing control circuitry for maintaining relative timing between portions of data in the received data stream and portions of data in the second output stream, wherein the timing control circuitry comprises a state machine. In an analogous art, Teunissen discloses timing control circuitry (figure 6, reference 126) for maintaining relative timing between portions of data in the received data stream and portions of data in the second output stream (figure 6, col. 5 lines 29-35).

One skilled in the art would have recognized the timing control circuitry for maintaining relative timing between portions of data in the received data stream and portions of data in the second output stream, and would have applied Teunissen's unpackaging a transport stream in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Teunissen's method of storing digital audio and/or video programs compressed on the basis of groups of pictures (GOP) on a medium with immediate jumping between groups through co-storage of transport stream packets and pointer information, a method for reading such information, and a device for storing and/or reading such information in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to synchronize video decoder block 122 and audio decoder block 124 (col. 5 lines 32-34).

Furthermore, Lenihan et al. in view of Teunissen do not expressly disclose wherein the timing control circuitry comprises a state machine. In an analogous art, Lee discloses wherein the timing control circuitry comprises a state machine (figure 7, reference 38, col. 7 lines 39-45).

One skilled in the art would have recognized the timing control circuitry comprises a state machine, and would have applied Lee's control state machine in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Lee's MPEG II system with PES decoder in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to provide the audio decoder 8 or video decoder 5 a regular decoding for the PS data (col. 7 lines 43-45).

For claim 24, Lenihan et al. disclose wherein the first plurality of portions of data comprises audio and video data (col. 4 lines 3-9).

For claim 25, Lenihan et al. disclose wherein the second plurality of portions of data comprises audio and video data (col. 8 lines 26-29).

For claims 26 and 31, Lenihan et al. disclose recording and playback of audio-video transport streams, said device comprising:

identifying circuitry (figure 3A, reference 314) for identifying a first plurality of portion of data in the received data stream and a second plurality of portion of data in the received data stream (col. 7 lines 15-31);

first output circuitry (figure 3A, references 355, 360 and 365 constitute the first processing circuit means) for producing a first output data stream corresponding to the first plurality of portion of data in the received data stream (col. 8 lines 29-54);

second output circuitry (figure 3A, references 350 and 240 constitute the second processing circuitry means) for producing a second output data stream corresponding to the second plurality of portion of data in the received data stream (col. 8 lines 26-29).

However, Lenihan et al. do not expressly disclose timing control circuitry coupled to the second output circuitry for maintaining relative timing between the received data stream and the second output stream, wherein the timing control circuitry comprises a state machine. In an analogous art, Teunissen discloses timing control circuitry (figure 6, reference 126) coupled to the second output circuitry for maintaining relative timing between the received data stream and the second output stream (figure 6, col. 5 lines 29-35).

One skilled in the art would have recognized the timing control circuitry coupled to the second output circuitry for maintaining relative timing between the received data stream and the second output stream, and would have applied Teunissen's unpackaging a transport stream in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Teunissen's method of storing digital audio and/or video programs compressed on the basis of groups of pictures (GOP) on a medium with immediate jumping between groups through co-storage of transport stream packets and pointer information, a method for reading such information, and a device for storing

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and/or reading such information in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to synchronize video decoder block 122 and audio decoder block 124 (col. 5 lines 32-34).

Furthermore, Lenihan et al. in view of Teunissen do not expressly disclose wherein the timing control circuitry comprises a state machine. In an analogous art, Lee discloses wherein the timing control circuitry comprises a state machine (figure 7, reference 38, col. 7 lines 39-45). Lee discloses further wherein the timing controller comprises a state machine (figure 7, reference 38, col. 7 lines 39-45 as set forth in claim 31).

One skilled in the art would have recognized the timing control circuitry comprises a state machine, and would have applied Lee's control state machine in Lenihan et al.'s recording and playback functions of system 200. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Lee's MPEG II system with PES decoder in Lenihan et al.'s recording and playback of audio-video transport streams with the motivation being to provide the audio decoder 8 or video decoder 5 a regular decoding for the PS data (col. 7 lines 43-45).

For claim 28, Lenihan et al. disclose wherein the first output stream comprises audio and video data (figure 3A, col. 8 lines 19-54).

For claim 29, Lenihan et al. disclose wherein the second output stream comprises audio and video data (figure 3A, col. 8-lines 26-29).

***Allowable Subject Matter***



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6. Claims 10 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Toan Nguyen*  
Toan Nguyen